

THKIT-TDB2138

Human Body Temperature Thermal Monitoring Kit



- Full Human Body Temperature Thermal Surveillance and Management Solution when adding NVR916NS (Sold Separately)
- Includes 1x THIP-TDB2138 Thermal Body Camera, 1x THBB-104F Temperature Reference Box,, 2x TH-TRIPOD and 2x TH-MNT mounts
- Camera features hybrid 400 × 300 VOx thermal sensor with 1080P visible camera
- Supports body temperature measurements, Measurement Accuracy: $\pm 0.54^{\circ}\text{F}$ with Temperature Reference Box

System Overview

The THKIT-TDB2138 kit includes the essential components of IC Realtime's Human Body Temperature Detection system. The kit includes the THIP-TDB2138 Human Body Thermal Camera and the THBB-104F Temperature Reference Box along with Tripods and mounting solutions for both devices. The THIP-TDB2138 features a hybrid 400 × 300 VOx thermal sensor paired with 1080P visible camera. The camera has a Measurement Accuracy of $\pm 0.54^{\circ}\text{F}$, when used with the included THBB-104F Temperature Reference Box.

This kit when combined with a Thermal AI enabled recorder such as the NVR-916NS (required, sold separately), completes IC Realtime's Human Body Temperature Thermal Surveillance and Management Solution- A safe and no risk method for a preliminary screening of temperature anomalies.

Functions

Body Temperature Measurement

IC Realtime's new thermal cameras are non-contact, multi-objective, rapid, and pose no risk to temperature testers, etc. It can be conveniently deployed in public places with dense personnel, and can be used for efficient and safe solution for preliminary screening of temperature anomalies.

High Sensitivity

High thermal sensitivity ($< 40\text{ mK}$) allows cameras to capture more image details and temperature difference information.

Uncooled Vox Technology

IC Realtime thermal cameras use uncooled Vox sensor technology. The compact size and excellent performance make this a cost-effective solution for thermal surveillance.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Protection (IP67, wide voltage)

Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times. Wide voltage: The camera allows $\pm 20\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with unstable voltage.

Technical Specification

Model	THIP-TDB2138
Thermal Camera	
Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	400 × 300
Pixel Pitch	17μm
Thermal Sensitivity (NETD)	≤40mK
Spectral Range	8 ~ 14um
Digital Detail Enhancement (DDE)	Support
Color Palettes	18 color modes selectable such as Whitehot/Blackhot/Ironrow/Icefire.
Focus Mode	Fixed-focal
Focal Length	13 mm
Aperture	F1.0
Field of View	13 mm: horizontal: 30°, vertical: 22.6°
Thermal Image Stabilization	Electronic Image Stabilization
AGC	Auto; manual
Noise Reduction	2D NR; 3D NR
Image Flip	90°/180°mirror
Temperature Measurement Range	86°F ~+113°F (30°C ~+45°C)
Temperature Accuracy	Max ±0.54°F (.03°C) with Temperature Reference Box Max ±1.8°F (1°C) without Temperature Reference Box
Temperature Mode	Spot: 12 Line: 12 Area: 12 Support 12 rules simultaneously
Visible Camera	
Image Sensor	1/2.8" 2M CMOS
Effective Pixels	1920(H)×1080(V)
Electronic Shutter Speed	1/1 ~ 1/30,000s
Min. Illumination	Color: 0.002Lux; B/W: 0.0002Lux; 0Lux (IR on)
IR Distance	Distance up to 114ft (35m)
IR On/Off Control	Auto/Manual
IR LEDs	1
Focal Length	8mm
Aperture	F1.9
Angle of View	H: 40° V: 22°
Video	
Compression	H.265; H.264; H.264H; H.264B; MJPEG
Image Encoding Format	JPEG
Region of Interest (ROI)	Support
Resolution	Thermal Main stream: (1280 × 1024/1024 × 768/640 × 480/256 × 192@), 1280 × 960 by default; Sub stream: (640 × 512/256 × 192@), 256 × 192 by default Visible Main stream: (1920 × 1080/1280 × 720/704 × 576@), 1920 × 1080 by default; Sub stream: (704 × 576/352 × 288@), 355 × 288 by default

Frame Rate	Thermal: 50Hz: Main stream (1fps-25fps),25fps by default; Sub stream (1fps-25fps),15fps by default; 60Hz: Main stream (1fps-30fps),30fps by default; Sub stream (1fps-30fps),15fps by default;
	Visual: 50Hz: Main stream (1fps-25fps),25fps by default; Sub stream (1fps-25fps),15fps by default; 60Hz: Main stream (1fps-30fps),30fps by default; Sub stream (1fps-30fps),15fps by default;

Audio

Compression	G.711a/ G.711Mu/ AAC/ PCM
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Network

Ethernet	1x 10M/100M Ethernet port (RJ-45)
Protocol	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, SMTP, FTP, DHCP, DNS, DDNS, PPPoE, IPv4/v6, SNMP, QoS, UPnP, NTP
Interoperability	CGI; ICR SDK
User/ Host	20 channels at most (the total bandwidth 64M)
User Management	Support 20 users at most and users are classified as two groups-administrator group and user group.
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
Edge Storage	FTP; Micro SD card (256G, hot plug)
Web Viewer	IE, Chrome, Firefox, Safari
Malfunction Detection	Network disconnection; IP addresses conflict; SD card error (status or storage space)

Interface

Audio Input/ Output	1/1 channel
Two-way Talk	Support
RS485	Support
Alarm Input/ Output	2/1 channel In/Out

Electrical

Power Supply	12V±20% DC, 1.2A, PoE (802.3af), ePoE Support
Power Consumption	Basic: 5.0W Maximum: 12W (power adapter excluded)
Power Adaptor	Selectable
Protection	Anti-surge 6KV, anti-electrostatic 8KV (touched by objects), anti-electrostatic 15KV (air)

Environmental

Operating Conditions	10°C to +30°C
Storage Conditions	-40°C to +70°C
Relative Humidity	≤ 95%
Ingress Protection	IP67

Construction

Casing	Metal
Dimensions	14.37" × 6.89" × 6.93" (365 mm × 175 mm × 176 mm)
Net Weight	3.09 lb(1.4Kg)
Gross Weight	4.19 lb (1.9Kg)

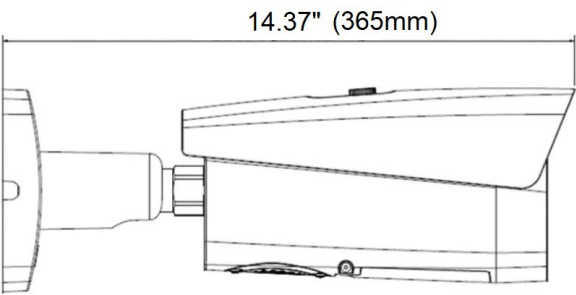
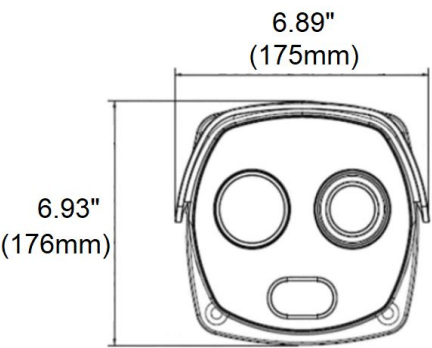
Technical Specification

Model	THBB-104F
System Overview	
Working temperature	Factory settings: □35.0°C □37.0°C □40.0°C (Environment temperature +5.0°C~50.0°C adjustable)
Effective radiant surface	2.7"x 2.7" (70mm×70mm)
Temperature resolution	0.1°C
Temperature accuracy	±0.2°C(single point)
Temperature stability	±(0.1~0.2)°C/30min
Effective emissivity	0.97
Temperature sensor	Pt100
Ambient temperature/humidity	0°C~40°C/ ≤80%RH
Power supply	220VAC, 50Hz, 35W
Applicable Models	THIP-TDB2078 , THIP-TDB2138
Net weight	3.96lbs (1.8 kg)
Dimensions	W4.3" x H4.72" x D7.08" (W110 mm× H120 mm ×D180 mm)

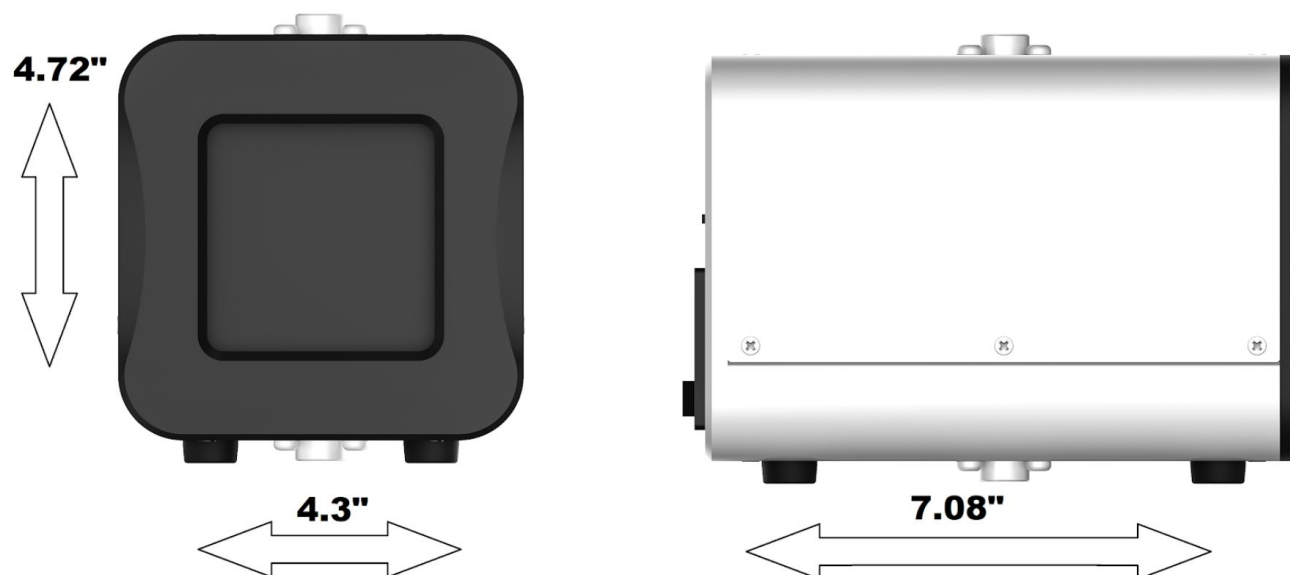
Included Accessories

2	TH-MNT Thermal Device mount
2	TH-TRIPOD Thermal Device tripod

Dimensions (mm/in)



Dimensions (mm/in)



Interface

